

**Notice of Allowability**

Application No.

10/721,898

Examiner

Shew-Fen Lin

Applicant(s)

CONRAD ET AL.

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/31/2007.
2. ☒ The allowed claim(s) is/are 1-2, 4-6, and 8-10 (renumbered as 1-8).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 12/3/2007
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
HOSAIN ALAM

SUPERVISORY PATENT EXAMINER

### **DETAILED ACTION**

- a. This action is taken to response to Request for Continued Examination filed on 10/31/2007.
- b. Claims 1-2, 4-6, and 8-10 are pending in this Office Action.

#### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 31, 2007 has been entered.

#### ***Terminal Disclaimer***

The terminal disclaimer filed on 10/31/2007 disclaiming the terminal portion of any patent granted on this application, which would extend beyond the expiration date of co-pending application 10/721,348 has been reviewed and is accepted. The terminal disclaimer has been recorded.

#### ***Examiner's Amendment***

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

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Authorization for this examiner's amendment was given in a telephone conversation with Applicant's attorney Stephen E. Kabakoff on January 2, 2008 and January 7, 2008.

Please amend the claims 9 and 10, which were filed on 10/31/2007, as follows:

9. (Currently Amended) A system for replicating data objects from a source system to a target system, the system comprising:

a source memory;

a target memory; and

a microprocessor coupled to the source and the target memories;

means for providing an electronic data element accessible to at least one software program implementing one or more data-object replication processes and one or more software processes other than the one or more data-object replication processes, the electronic data element comprising a first field having an identifier and a second field having a state of the identifier, wherein the state of the identifier is set to one of the following states:

a) a first state, in which said electronic data element is accessible by one or more of the software processes other than the data-object replication processes and whereby said identifier is assignable to one or more data objects stored in a memory,

b) a second state, in which said electronic data element is not accessible by one or more of the software processes other than the data-object replication processes and whereby said identifier is assigned to one or more data objects stored in a memory, and

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c) a third state, in which said electronic data element is not accessible by one or more of the software processes other than the data-object replication processes and whereby said identifier is not assignable to one or more data objects stored in a memory;

means for setting the state of the identifier to the first state;

means for assigning, after setting the state of the identifier to the first state, the identifier to one or more data objects stored in a memory of the source system;

means for processing, by one or more of the software processes other than the data-object replication processes, data object processing operations, the one or more assigned data objects while the identifier is set to the first state;

means for changing the state of the identifier from the first state to the second state while at least some of the one or more assigned data objects are being processed by the one or more software processes other than the data-object replication processes;

means for changing the state of the identifier to the third state when the one or more assigned data objects are finished being processed by the one or more software processes other than the data-object replication processes; data object processing operations;

~~means for changing the state of the identifier from the first state to the second state while at least some of the one or more assigned data objects are being processed by the one or more software processes other than the data-object replication processes;~~

means for replicating, by the one or more data-object replication processes after the state of the identifier has been changed to the third state, the one or more assigned data objects from the memory in the source system to a memory in the target system.

10. (Currently Amended) A computer-readable ~~medium~~ memory storing instructions for execution by a processor, the instructions when executed by the processor for performing a method of replicating data objects from a source system to a target system, the method comprising:

(rest of the claim 10 unchanged)

### *Reasons for Allowance*

The following is an examiner's statement of reasons for allowance:

The prior art made of records does not teach or fairly suggest the combination of elements, as recited in independent claims 1, 5, 9, and 10. More specifically, the prior art of records does not specifically suggest wherein as argued and further amended by Applicant's "changing the state of the identifier from the first state to the second state while at least some of the one or more assigned data objects are being processed by the one or more software processes other than the data-object replication processes; changing the state of the identifier to the third state when the one or more assigned data objects are finished being processed by the one or more software processes other than the data-object replication processes; and replicating, by the one or more data-objects replication processes after the state of the identifier has been changed to the third state, the one or more assigned data objects from the memory in the source system to a memory in the target system" as recited in claims 1, 5, 9, and 10.

The dependent claims, being definite, further limiting, and fully enabled by the specification and are also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shew-Fen Lin whose telephone number is 571-272-2672. The examiner can normally be reached on 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shew-Fen Lin  
Patent Examiner

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January 7, 2008

  
**HOSAIN ALAM**  
**SUPERVISORY PATENT EXAMINER**